

Version with Markings to Show Changes Made

1. (Amended) A receive path of a voice messaging system with speakerphone capability, comprising:

a receive signal from a telephone line;
a summer in said receive path;
a gain module; [and]
a message playback signal relating to a pre-recorded voice message; and

a record module adapted to record said receive signal from said telephone line during a conversation on said speakerphone;

wherein said message playback signal is combined with said receive signal by said summer, allowing simultaneous hearing by a local user of said speakerphone.

2. (Amended) The receive path of a voice messaging system with speakerphone capability according to claim 1, further comprising:

a switched loss echo suppression module in said receive path.

8. (Amended) The receive path of a voice messaging system with speakerphone capability according to claim 2, further comprising:

a digital to analog converter in said [transmit] receive path at a point after said switched loss echo suppression module.

14. (Amended) A method of allowing a playback message signal to be combined with a receive signal in a voice messaging system having speakerphone capability, comprising:

hybrid echo canceling a transmit signal from a receive signal at a summer in a receive path of a voice messaging system having speakerphone capability;

summing a playback message signal together with said hybrid echo cancel[!]ed signal at a point in said receive path after said summer; [and]

maintaining said speakerphone in a receive state until transmit activity is detected; and

recording said receive signal during a conversation on said speakerphone.

receive ?

15. (Amended) Apparatus for allowing a playback message signal to be combined with a receive signal in a voice messaging system having speakerphone capability, comprising:

means for hybrid echo canceling a transmit signal from a receive signal at a summer in a receive path of a voice messaging system having speakerphone capability;

means for summing a playback message signal together with said hybrid echo cancel[!]ed signal at a point in said receive path after said summer; [and]

means for maintaining said speakerphone in a receive state until transmit activity is detected; and

means for recording said receive signal during (a) conversation on said speakerphone.

16. (Amended) A method of playing back a recorded voice message, comprising:

establishing a telephone call;

initiating a speakerphone function of a near end voice messaging device in said telephone call;

playing back a voice message recorded on said near end voice messaging system while said telephone call remains established; [and]

injecting an electrical signal corresponding to said played back voice message into said telephone call such that individual users at either end of said telephone call can hear said played voice message and concurrently converse with one another as desired; and

recording an incoming voice signal associated with said telephone call during a conversation on a speakerphone.

18. (Amended) The method of playing back a recorded voice message according to claim 16 [14], wherein:

said electrical signal is injected digitally.

19. (Amended) Apparatus for playing back a recorded voice message, comprising:

means for establishing a telephone call;

means for initiating a speakerphone function of a near end voice messaging device in said telephone call;

means for playing back a voice message recorded on said near end voice messaging system while said telephone call is established; [and]

means for injecting an electrical signal corresponding to said played back voice message into said telephone call such that individual users at either end of said telephone call can hear said played voice message and concurrently converse with one another as desired; and

means for recording an incoming voice signal associated with said telephone call during a conversation on a speakerphone.

21. (Amended) The apparatus for playing back a recorded voice message according to claim 19 [17], wherein:

means for injecting said electrical signal injects said signal digitally.

REMARKS

Claims 1, 2, 8, 14-16, 18, 19 and 21 are amended herein. Claims 1-22 remain pending in the application.

In the Drawings

Figs. 1 was objected to for allegedly mislabeling amplifier 156 and Fig. 3 was objected to for allegedly missing block 206.

A proposed drawing correction is attached hereto to Figs. 1 and 3.

Approval of the proposed corrections and withdrawal of the objections are respectfully requested.

35 USC 112 Second Paragraph Rejection of Claims 7, 8, 18 and 21

The Office Action rejected claims 7, 8, 18 and 21 as allegedly being indefinite under 35 USC 112.

The claims 2, 8, 18 and 21 have been amended where appropriate to correct the alleged indefiniteness. It is respectfully submitted that claims 7, 8, 18 and 21 are now in full conformance with 35 USC 112. It is respectfully requested that the rejection be withdrawn.

Claims 1-3, 7, 9-11, 16 and 19 over Sacca

In the Office Action, claims 1-3, 7, 9-11, 16 and 19 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Sacca, U.S. Patent No. 5,692,042 ("Sacca"). The Applicants respectfully traverse the rejection.

Claims 1-3, 7, 9-11 recite, *inter alia*, a record module adapted to record a receive signal from a telephone line during a conversation on a speakerphone. Claims 16 and 19 recite, *inter alia*, recording an incoming voice signal associated with a telephone call during a conversation on a speakerphone.

Sacca appears to teach a speakerphone which employs non-linear amplifiers to compress transmit and receive signal (Abstract). Level detectors determine levels of the compressed transmit and receive signal (Sacca, Abstract). Selector switches permit the connection of a combined source signal and a signal from a handset microphone for transmission to a telephone line

(Sacca, col. 8, lines 39-43). The combined source signal carries one or more alternate signal sources, e.g., tape playback, tones, synthesized speech, etc. for transmission over the telephone line (Sacca, col. 8, lines 43-49).

Sacca teaches combining a tape playback signal with a speakerphone signal for transmission over a telephone line. Sacca fails to teach any type of recording, much less recording a signal from a telephone line during a conversation on a speakerphone, as respectively claimed by claims 1-3, 7, 9-11, 16 and 19.

Accordingly, for at least all the above reasons, claims 1-3, 7, 9-11, 16 and 19 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claim 4 over Sacca in view of Horan

In the Office Action, claim 4 was rejected under 35 U.S.C. §103(a) as allegedly being obvious over Sacca in view of Horan, U.S. Patent No. 6,347,136 ("Horan"). The Applicants respectfully traverse the rejection.

Claim 4 is dependent on claim 1, and is allowable for at least the same reasons as claim 1.

Claims 4 recites, *inter alia*, a record module adapted to record a receive signal from a telephone line during a conversation on a speakerphone.

As discussed above, Sacca fails to teach recording a signal from a telephone line on a speakerphone, as respectively claimed by claim 4.

The Office Action relies on Horan to allegedly make up for the deficiencies in Sacca to arrive at the claimed invention. The Applicants respectfully disagree.

Horan appears to teach a calling party announcement apparatus and method for providing an identity of a caller in a non-synthesized, pre-recorded human speech (Abstract). The calling party announcement apparatus further includes an answering machine (Horan, col. 3, line 51-55). The calling party announcement apparatus outputs the identity information to a telephone speakerphone (Horan, col. 5, lines 18-21).

Horan teaches an answering machine. Answering machines record an incoming message from a caller NOT a signal produced during a conversation on a speakerphone, as claimed by claim 4.

Neither Sacca nor Horan, either alone or in combination, disclose, teach or suggest a record module adapted to record a receive signal from a telephone line during a conversation on a speakerphone, as claimed by claim 4.

Accordingly, for at least all the above reasons, claim 4 is patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claim 5 over Sacca in view of Horan and Li

In the Office Action, claim 5 was rejected under 35 U.S.C. §103(a) as allegedly being obvious over Sacca in view of Horan, and further in view of Li, U.S. Patent No. 5,612,996 ("Li"). The Applicants respectfully traverse the rejection.

Claim 5 is dependent on claim 1, and is allowable for at least the same reasons as claim 1.

Claim 5 recites, *inter alia*, a record module adapted to record a receive signal from a telephone line during a conversation on a speakerphone.

As discussed above, neither Sacca nor Horan, either alone or in combination, disclose, teach or suggest a record module adapted to record a receive signal from a telephone line during a conversation on a speakerphone, as claimed by claim 5.

The Office Action relies on Li to allegedly make up for the deficiencies in Sacca and Horan to arrive at the claimed invention. The Applicants respectfully disagree.

Li appears to teach a loop gain processing scheme for a speakerphone (Abstract). A system loop gain is determined according to two echo feedback paths within the speakerphone system (Li, Abstract). Li teaches the prior art had used a gain module comprised of an automatic gain control in conjunction with a receive channel gain adjustment (Li, Fig. 1; col. 3, lines 44-52).

Li teaches gain control for a speakerphone. Li fails to teach a record module adapted to record a receive signal from a telephone line during a conversation on a speakerphone, as claimed by claim 5.

Neither Sacca, Horan nor Li, either alone or in combination, disclose, teach or suggest a record module adapted to record a receive signal from a telephone line during a conversation on a speakerphone, as claimed by claim 5.

Accordingly, for at least all the above reasons, claim 5 is patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claims 6, 12-15, 17 and 20 over Sacca in view of Li

In the Office Action, claims 6, 12-15, 17 and 20 were rejected under 35 U.S.C. §103(a) as allegedly being obvious over Sacca in view of Li. The Applicants respectfully traverse the rejection.

Claims 6, 12 and 13 are dependent on claim 1, and are allowable for at least the same reasons as claim 1.

Claims 6, 12-15, 17 and 20 recite *inter alia*, recording a receive signal from a telephone line during a conversation on a speakerphone.

As discussed above, Sacca fails to disclose, teach or suggest a recording a receive signal from a telephone line during a conversation on a speakerphone, as claimed by claims 6, 12-15, 17 and 20.

The Office Action relies on Li to allegedly make up for the deficiencies in Sacca and Horan to arrive at the claimed invention. The Applicants respectfully disagree.

As discussed above, Li fails to teach recording a receive signal from a telephone line during a conversation on a speakerphone, as claimed by claim 6, 12-15, 17 and 20.

Neither Sacca nor Li, either alone or in combination, disclose, teach or suggest recording a receive signal from a telephone line during a conversation on a speakerphone, as claimed by claim 6, 12-15, 17 and 20.

Accordingly, for at least all the above reasons, claims 6, 12-15, 17 and 20 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claim 8 over Sacca in view of Knuth and Li2

In the Office Action, claim 8 was rejected under 35 U.S.C. §103(a) as allegedly being obvious over Sacca in view of Knuth et al., U.S. Patent No. 5,768,349 ("Knuth"), and further in view of Li, U.S. Patent No. 5,646,990 ("Li2"). The Applicants respectfully traverse the rejection.

Claim 8 is dependent on claim 1, and is allowable for at least the same reasons as claim 1.

Claim 8 recites, *inter alia*, a record module adapted to record a receive signal from a telephone line during a conversation on a speakerphone.

As discussed above, Sacca fails to disclose, teach or suggest a record module adapted to record a receive signal from a telephone line during a conversation on a speakerphone, as claimed by claim 8.

The Office Action relies on Knuth and Li2 to allegedly make up for the deficiencies in Sacca to arrive at the claimed invention. The Applicants respectfully disagree.

Knuth appears to teach a digital telephone answering device that allows messages to be forwarded to certain internal mailboxes (Abstract). Messages can be moved or re-assigned from a common message area to a certain mailbox or mailboxes (Knuth, Abstract). The telephone answering device includes speakerphone capability (Knuth, col. 8, lines 44-55).

Li2 appears to teach a system and method for eliminating howling due to sudden changes in the acoustic echo path between a speakerphone microphone and a loudspeaker (Abstract). An automatic gain control module and a scale factor is located before a D/A converter (Li2, Fig. 2).

Knuth and Li2 teach automatic gain control for a speakerphone. Knuth and Li2 fail to disclose, teach or suggest a record module adapted to record a receive signal from a telephone line during a conversation on a speakerphone, as claimed by claim 8.

Neither Sacca, Knuth nor Li2, either alone or in combination, disclose, teach or suggest a record module adapted to record a receive signal from a telephone line during a conversation on a speakerphone, as claimed by claim 8.

Accordingly, for at least all the above reasons, claim 8 is patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,



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